

Cell culture, RNAi experiments, and adenoviral infection

ZX Zhisheng Xu ZG Zhenji Gan

Updated date: Jun 20, 2022

 An abbreviated version of this protocol was published in Nature Communications in Feb 2022

Disuse-associated loss of the protease LONP1 in muscle impairs mitochondrial function and causes reduced skeletal muscle mass and strength

DOI: 10.1038/s41467-022-28557-5

Detailed protocol

Primary myoblasts were plated on collagen-coated plates fed with growth medium (GM) (Ham's F-10 medium supplemented with 20% FBS and 2.5 ng/mL bFGF). Until cells were confluent to approximately 70-80% of plate, primary myoblasts can be infected with adenovirus overexpressing Cre or control virus particles re-suspended in GM at appropriate titer. After 12 hours of infection, cells were washed with DPBS warmed to 37°C to remove virus containing medium. Then cells were switched to differentiation medium (DM) (Dulbecco's modified Eagle's medium with 2% horse serum) to differentiate into myotubes. After 72 hours of incubation, myotubes were harvested to further investigation. The medium was changed daily.

How to cite: (Readers should cite both the Bio-protocol preprint and the original research article where this protocol was used)

1. Xu, Z. and Gan, Z. (2022). Cell culture, RNAi experiments, and adenoviral infection. Bio-protocol Preprint. [bio-protocol.org/preprint1734](https://www.bio-protocol.org/preprint/1734).
2. Xu, Z., Fu, T., Guo, Q., Zhou, D., Sun, W., Zhou, Z., Chen, X., Zhang, J., Liu, L., Xiao, L., Yin, Y., Jia, Y., Pang, E., Chen, Y., Pan, X., Fang, L., Zhu, M., Fei, W., Lu, B. and Gan, Z. (2022). Disuse-associated loss of the protease LONP1 in muscle impairs mitochondrial function and causes reduced skeletal muscle mass and strength. Nature Communications 0(0). DOI: [10.1038/s41467-022-28557-5](https://doi.org/10.1038/s41467-022-28557-5)

Copyright: Content may be subjected to copyright.